

Business Models for a Circular Economy

Business Model	
1 Procurement	<ul style="list-style-type: none"> - Sell renewable energy and renewable materials <i>(e.g. Solar power, Inverter, UPS, PowerBank @ KMD Sales)</i> Impact: Save energy, Save material, Reserve resources - Use renewable energy and renewable materials inside the company <i>(e.g. LED light, Solar power, Inverter, UPS, Copier @ KMD Offices)</i> Impact: Save energy, Save cost, Reserve resources
2 Collection and Recycling	<ul style="list-style-type: none"> - Collect products whose service lives have ended <i>(e.g. used computers & accessories @ KMD Offices)</i> Impact: no old and outdated items, no repair cost - Collect waste and by-products that are generated in the company's processes & operations <i>(e.g. used computers, old record books/papers @ KMD Offices donation of computers to schools)</i> Impact: Clean, healthy environments
3 Extend product service lives	<ul style="list-style-type: none"> - Recover used products <i>(e.g. regular maintenance of computers, office equipment, power generators, vehicles @ KMD Offices)</i> Impact: Save cost, Reserve resources - Collect and resell used products <i>(e.g. used computers & accessories, office equipment, etc. @ KMD MRS)</i> Impact: Save cost, Save material, Reserve resources - Get profits by upgrading and changing/repairing disposal parts <i>(e.g. upgrade computers, mobile devices @ KMD Service)</i> Impact: Save cost, Get profits, Reserve resources - Focus on customers who prefer premium quality, and make products that will last long time <i>(e.g. selling premium quality products, providing quality services, that last long time @ KMD Sales)</i> Impact: Quality products, Long life - Make earning models such as pay-per-service (<i>cost is incurred in accordance with the amount used</i>) <i>(e.g. computers rental, service contract @ KMD MRS)</i> Impact: Save cost for customers
4 Convert from ownership to sharing	<ul style="list-style-type: none"> - Make more efficient use of products/services possible by means of lending, borrowing, sharing, exchanging products, and take full advantages on products & services <i>(e.g. Server & network, printer @ KMD Offices donation to schools)</i> Impact: Save cost, Common share, Efficient use
5 Change products into services	<ul style="list-style-type: none"> - Make the model where people only pay for the amount of products & services that they use as Pay-as-you-go, lease, rental, performance contracts, etc. <i>(e.g. education training, computers rental, service contract @ KMD Institute, KMD MRS)</i> Impact: Save cost for customers, New model of services

- Sell renewable energy and renewable materials
(e.g. Solar power, Inverter, UPS, PowerBank @ KMD Sales)

Our KMD Group procurement used to do sourcing of vendor from local and global suppliers in total around 500.

We change our procurement practice with below principles and the outcome as below:

Human Rights, Labor, Environment and Anti-Corruption

Although other factors have met 99.9%, Environment has still challenges and we manage to change with vendors as below and see the progress of 50% in vendors behavior in 2019:

1. Moving communications of product info, prices list and other paper based to electronic form and waste disposal to recycler.
2. Following up with their waste management of end products.
3. Sourcing of certified products for internal use, distributions and reselling.

Impact: Qualified Suppliers, Save energy, Save material, Reserve resources

- Collect products whose service lives have ended
(e.g. used computers & accessories @ KMD Offices)

Our group has been using IT equipments in total of around 600 pcs.

Every year, 10% of those need to be replaced. We take those from operations, refurbish and resell to secondary market using different channel to low income market users.

Impact: Operations efficiency increased, less maintenance, more accessible to ICT technology to some group of low income users, less impact on environments from electronic waste, no repair cost.

- Collect waste and by-products that are generated in the company's processes & operations
(e.g. used computers, old record books/papers @ KMD Offices | donation of computers to schools)

Group paper usage ~ 680,000 sheets as of 2018. Encourage of using shared drive, electronic report, re-using of non-confidential one side blank paper and more focus on those practices in 2019.

- 20% decrease of paper usage in 2019
- Staff using water bottle with refill to staffs and giving out water bottles to guests upon requests only.

It results in using water bottle 564 pcs in 2019 in compare with close to 1000 pcs in 2018. Our retails provide only recycle bag to customers 50,000 bags.

Impact: Clean, healthy environments, less waste products

- Recover used products
(e.g. regular maintenance of computers, office equipment, power generators, vehicles @ KMD Offices)

Our institute has 350 pcs of Desktops and 20% of those need to upgrade every year to train new courses which demand higher performance and operations.

And regular maintenance of all PCs and facilities by related service team had extended usable life span of the equipment.

Impact: Save cost, Reserve resources

- Collect and resell used products <i>(e.g. used computers & accessories, office equipment, etc. @ KMD MRS)</i>
300 over devices every year
Impact: Save cost, Save material, Reserve resources, Get profits, Reuse Parts to limit waste to environment

- Focus on customers who prefer premium quality, and make products that will last long time <i>(e.g. selling premium quality products, providing quality services, that last long time @ KMD Sales)</i>
Selling premium quality products: 20% of total sales Providing quality services and awareness to last the product life span with customer
Impact: Quality products, Long life

- Make earning models such as pay-per-service <i>(cost is incurred in accordance with the amount used)</i> <i>(e.g. computers rental, service contract @ KMD MRS)</i>
Provide Leasing/Rental Options @ KMD Enterprise - Copier machines - Servers/PCs - Maintenance Service bundled
Impact: No Capital Expenditures and Customers could run with Operation Expenditures model. Products are well maintained as maintenance service is included and longer life span.

- Make more efficient use of products/services possible by means of lending, borrowing, sharing, exchanging products, and take full advantages on products & services <i>(e.g. Server & network, printer @ KMD Offices donation to schools)</i>
Move to use cloud based technology centric approaches to have better collaborations and less physical/personal storage, printings. - Adapt to Office 365 and utilizing all features - Change to centralized printing with record usage
Impact: Save cost, Common share, Efficient use, Increase productivity

- Make the model where people only pay for the amount of products & services that they use as Pay-as-you-go, lease, rental, performance contracts, etc. <i>(e.g. education training, computers rental, service contract @ KMD Institute, KMD MRS)</i>
Offering installments plan on all the products we offered. Education training: 30% of total diploma and Degree students Retail: 70% of sales on mid to high value items
Impact: Affordability for customers, get quality product and education services with regular income, Save cost for customers, New model of services
